Potential of bio-mass Technologies

2492. SHRI MOTIUR RAHMAN: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether modern biomass technologies have the potential to alleviate poverty, improve health, reduce drudgery of women and children, increase productivity, create employment and generate income in rural areas, thereby reducing rural to urban migration;

(b) whether Government have failed in tapping the huge bio-mass potential available in the country; and

(c) if so, the steps taken to bring bio-energy into mainstream for meeting/supplementing the energy demands in urban and rural areas at an affordable price?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI VILAS MUTTEMWAR): (a) to (c) For tapping the potential of biomass in the country and promoting modern biomass technologies to meet and supplement energy demand, the Government have already taken several steps, including, continuation of various schemes relating to bio-energy, namely National Biogas and Manure Management Programme, which caters to family type biogas plants; Biomass Gasifier Programme; Biomass Power/Co-generation Programme; Biogas based Distributed/Grid Power Generation Programme and Village Energy Security Test Projects during 2006-07, Provision for financial and fiscal incentives, and support for training, publicity, etc.

Solar radiation data

2493. SHRIMATI N.P. DURGA: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) the reasons for which Government have not updated the solar radiation data since 1982;

(b) whether this affected the targets with regard to non-conventional energy sources set in the successive Five Year Plans;

(c) the details of solar energy produced in the country since 1982, year-wise and State-wise;

(d) the incentives his Ministry is giving to the producers of solar energy; and

(e) whether any target has been set to reach the villages with solar energy where the conventional power has not yet been reached?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI VILAS MUTTEMWAR): (a) Measurement of weather data including that of solar radiation is done on regular basis in the country.

Based on the measured data, two handbooks were brought out in 1982. In order to update this data, the Ministry has taken up a project with India Meteorological Department, which is under progress.

(b) Various solar energy systems are designed based on long term average values of solar radiation and the associated weather parameters. Therefore, it has no adverse impact on the targets.

(c) A total 32 number of grid interactive SPV power plant projects have been installed in various States and Union Territories under Ministry's Programme with total aggregate capacity of 2.1 mega-watts (peak). The year-wise and State-wise details of these plants are given in Statement (*See* below). These plants are estimated to generate about 2.5 million units of electricity in a year. In addition, 5,60,295 solar lanterns, 3,42,607 solar home lighting systems, 54,795 solar street lighting systems, 7002 solar pumps, and stand alone power plants of aggregate capacity of 1.852 megawatt(peak) have also been installed in the country.

Further, a total solar collector area of 15.0 lakh square meter has also been installed in the country for solar water heating applications.

(d) The Ministry has been providing number of incentives like subsidy, soft loan, 80% accelerated depreciation, concessional duty on import of raw materials and certain products, excise duty exemption on certain devices/systems etc. for the production and use of solar energy systems.

(e) The Ministry is implementing a programme for electrification of those remote unelectrified census villages and unelectrified hamlets of electrified census villages where grid extension is either not feasible or not cost effective. Such villages are provided basic facilities of electicity through various non-conventional energy sources including solar energy. A target for electrification of 5000 villages has been set for the Tenth Plan.

Statement

State-wise list of grid interactive SPV power plant projects installed in the country

Sl. No.	State	Year of installation	Capacity of power plant (kWp)
1.	Andhra Pradesh	2001-02	100
2.	Andaman &	2002-03	50
3.	Nicobar Islands	2004-05	50
4.	Arunachal Pradesh	2004-05	25
5.	Kerala	1999-00	25
6.	Lakshadweep	1999-00	100
7.		2001-02	100
8.		2001-02	150
9.		2001-02	100
10.		2002-03	100
11.		2004-05	100
12.		2004-05	100
13.	Madhya Pradesh	1999-00	100
14.	Pondicherry	2004-05	25
15.	Punjab	1999-00	50
16.		1999-00	50
17.		2000-01	25
18.		2002-03	200
19.	Rajasthan	2001-02	25
20.		2001-02	25
21.		2002-03	100
22.	Tamil Nadu	1996-97	25
23.		1997-98	25
24.	Uttar Pradesh	1992-93	100
25.		1994-95	100
26.		1998-99	25
27.		2000-01	100
28.		2005-06	25
29.	Uttaranchal	2002-03	25
30.		2002-03	25
31.	West Bengal	1998-99	25
32.		2000-01	25